REMARKS/ARGUMENTS

Claims 1-11 are all the claims pending in this application.

Reconsideration of the subject patent application and allowance of the claims are respectfully requested in view of the following remarks.

Claims 1, 2 and 6-8 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Konishi (U.S. Patent No. 5,898,926) ("Konishi") in view of Reed et al. (U.S. Patent No. 5,634,206) ("Reed").[1] Claims 3, 4, 9 and 10 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Konishi in view of Reed, and further in view of Kimura et al. (U.S. Patent No. 5,649,319) ("Kimura").[2] Claims 5 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Konishi in view of Reed, and further in view of Levanon (U.S. Patent No. 6,369,754) ("Levanon").[3] For the reasons set forth below, Applicant respectfully traverses these rejections.

To establish a prima facie case of obviousness, the Patent Office must demonstrate: (1) a suggestion or motivation to combine reference teachings, (2) that there was a reasonable expectation of success, and (3) that prior art reference or references teach or suggest all claim limitations.[4] Motivation to combine references can come from "the nature of the problem to be solved, the teachings of the prior art, [or] knowledge of persons of ordinary skill in the art."[5] The §103 rejections are improper because the Patent Office has failed to establish a *prima facie* case of obviousness in that the cited references do not disclose all limitations of the rejected claims, and,

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1 Office Action, para. 5.

2 Office Action, para. 6.

3 Office Action, para. 7.

4 In re Vaeck, 947 F.2d. 488, 493, 20 USPQ2d. 1438 (Fed. Cir. 1991); see, e.g., MPEP § 2142, at 2100-128 (Rev. 2, May 2004).

5 In re Rouffet, 149 F.3d 1350, 1358, 47 USPQ2d 1453 (Fed. Cir. 1998).

moreover, there is no motivation or suggestion to modify Konishi, and incorporate the teachings of Reed, Kimura and/or Levanon into Konishi in the manner suggested.

I. The Cited References Do Not Disclose All Limitations of the Rejected Claims

A. Claims 1, 2 and 6-8

The Patent Office avers that Konishi discloses the invention of independent claims 1 and 7, but acknowledges that it does not disclose the claimed "control device."[6] The Patent Office relies on Reed to remedy this deficiency of Konishi.[7] Applicant respectfully disagrees.

Independent claim 1 recites, inter alia, "a control unit that adjusts a time interval for field intensity measurement in the measuring unit, taking into consideration an increasing or decreasing tendency of the field intensity with respect to the base stations measured by the measuring unit." Independent claim 7 has a similar limitation. Reed fails to disclose, teach or suggest this limitation.

The Patent Office asserts that Reed discloses this limitation at column 4, lines 27-67.[8] However, there is no disclosure in the Reed reference that "a control unit [] adjusts a time interval for field intensity measurement in the measuring unit." In fact, Reed, which discloses a plurality of antennas and a plurality of branch receivers for measuring a characteristic of a fading signal, states that "it is desirable to adjust the averaging interval for [AVG] blocks 140 and 145 to get accurate measures ... ."[9] For example, at slow speeds, a longer averaging interval is desired to obtain more reliable (constant) averages. There is no disclosure, however, of increasing or decreasing the field intensity and adjusting the time interval for field intensity measurement in the Reed

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6 Office Action at 3.

7 Id.

8 Id.

9 Reed, col. 4, lines 28-29.

reference. Adjusting the averaging interval simply implies extending the sampling time of signal intensity for averaging. Further, the AVG blocks 140 and 145 (of Reed) are not measuring units that measure a field intensity of signals from a plurality of base stations adjacent to a base station servicing a mobile station. Correspondingly, the averaging interval for the AVG blocks 140 and 145 is not a time interval for field intensity measurement in a measuring unit. Moreover, a branch imbalance estimator 150, which is not a control unit, calculates the difference between the averages of the AVG blocks 140 and 145. Clearly, neither Konishi nor Reed disclose, teach or suggest the claimed control unit. Thus, Applicant respectfully requests that the rejection of claims 1 and 7 be reversed.

Dependent claims 2, 6 and 8 depend on at least one of independent claims 1 and 7, and should be allowable for at least the same reasons discussed above with respect to claims 1 and 7, in addition to the features they recite. For example, claim 2 recites "wherein said control unit reduces the time interval for field intensity measurement with respect to a base station as the field intensity undergoes an increase, and extends the time interval for field intensity measurement with respect to the base station as the field intensity undergoes a decrease." Dependent claim 8 has a similar limitation. The Patent Office asserts that Reed discloses this limitation at column 5, lines 40-65.[10] This assertion is without merit.

As discussed above, Reed does not disclose the claimed control unit. Further, the text relied upon by the Patent Office simply states that when speed (velocity) increases for a subscriber, timing factors may be adjusted (e.g., adjustment is based solely on velocity). Reed does not teach or suggest that "the time interval for field intensity measurement with respect to a base station [is reduced] as the *field intensity undergoes an increase*, and [] the time interval for field intensity measurement with

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[10] Office Action at 4.

respect to the base station [is extended] as the *field intensity undergoes a decrease*" (emphasis added).

Dependent claim 6 recites "wherein said control unit is provided in the base station servicing the mobile station." The Patent Office avers that this limitation is disclosed in column 4, lines 8-27.[11] However, there is absolutely no teaching or suggestion that a control unit is provided at a base station in the text relied upon by the Patent Office or in the Reed reference. Moreover, Reed does not disclose the claimed control unit.

None of the cited prior art references disclose, teach or suggest the limitations of dependent claims 2, 6 and 8. Thus, Applicant respectfully requests that the rejection of these claims be reversed.

B. Claims 3, 4, 9 and 10

Dependent claims 3, 4, 9 and 10 depend on at least one of independent claims 1 and 7, and should be allowable for at least the same reasons discussed above with respect to claims 1 and 7, in addition to the features they recite. For example, dependent claim 3 recites "wherein said control unit controls the time interval for field intensity measurement with respect to the base stations, taking into consideration absolute values of field intensity with respect to the base stations." Dependent claim 9 has a similar limitation. The Patent Office contends that Kimura discloses this limitation at column 10, lines 12-14.[12] Applicant disagrees.

Kimura does not teach or suggest "control[ling] the time interval for field intensity measurement ... taking into consideration absolute values of field intensity *with respect to the base stations*" (emphasis added). The only "absolute value of electric field

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[11] Id.

[12] Office Action at 5.

intensity" that is taken into consideration (in the Kimura reference) is with respect to a "grid matrix."[13] The grid matrix is not a plurality of base stations.

Dependent claim 4 recites "wherein said control unit reduces the time interval for field intensity measurement with respect to a base station as the absolute value of field intensity with respect to the base station becomes large." Dependent claim 10 has a similar limitation. The Patent Office asserts that Reed discloses this limitation at column 5, lines 40-65.[14] For similar reasons discussed above, Reed does not satisfy this limitation.

None of the cited prior art references disclose, teach or suggest the limitations of dependent claims 3, 4, 9 and 10. Hence, Applicant respectfully requests that the rejection of these claims be reversed.

C. Claims 5 and 11

Dependent claims 5 and 11 depend on at least one of independent claims 1 and 7, and should be allowable for at least the same reasons discussed above with respect to claims 1 and 7, in addition to the features they recite. For example, dependent claim 5 recites "wherein said control unit controls the time interval for field intensity measurement with respect to a base station, taking into consideration a direction of movement of a satellite." Dependent claim 11 has a similar limitation. The Patent Office avers that Levanon discloses this limitation at column 5, line 56-column 6, line 17.[15] Applicant disagrees.

In the present invention, as set forth in claims 5 and 11, a control unit controls the time interval for field intensity measurement with respect to a base station, taking into consideration a direction of movement of a satellite. Levanon simply discloses satellite positioning. This disclosure, however, has absolutely no relevance to

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[13] Kimura, col. 9, lines 27-28.

[14] Office Action at 5.

[15] Office Action at 6.

controlling the time interval for field intensity measurement with respect to a base station.

None of the cited prior art references disclose, teach or suggest the limitations of dependent claims 5 and 11. Hence, Applicant respectfully requests that the rejection of these claims be reversed.

II. There is No Motivation or Suggestion to Combine the Cited References.

A. Konishi and Reed combination

The combined disclosures of Konishi and Reed do not render the pending claims obvious because there is no motivation, absent the hindsight reconstruction of the present invention, to modify the disclosure of Konishi in accordance with the disclosure of Reed.

"When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references."[16] Virtually all inventions are combinations of old elements.[17] If identification of each claimed element in the prior art were sufficient to negate patentability, the Patent Office could use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention.[18] To prevent the use of hindsight based on the teachings of the patent application, the Patent Office must show a motivation to combine the references in the manner suggested.[19]

In Rouffet, the Court of Appeals held that although all elements recited in the claims of Rouffet's application were arguably disclosed in the applied prior art references, the rejection under 35 U.S.C. § 103 was improper because there was no

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16 Rouffet, 47 USPQ2d at 1453; see, e.g., MPEP § 2143.01.

17 See Rouffet, 47 USPQ2d at 1457.

18 See id.

19 See id. at 1457-58.

suggestion as to why one skilled in the art would have been motivated to combine the references in such a manner as to render the claims obvious.[20]

The situation is, at best, the same in this case. Even if all elements recited in the pending claims can be found in the combined disclosures of Konishi and Reed (although they cannot), there is no reason that one of ordinary skill in the art would have been motivated to combine these references in such a manner as to render the pending claims obvious. The Patent Office contends that:

> [I]t would have been obvious to one of ordinary skill in the art to modify Konishi to include adjusting the averaging interval for the purpose of obtaining accurate measurements under multi-path fluctuation.[21]

However, the Patent Office has merely speculated and provides no support for this contention. As discussed above, Reed does not disclose "a control unit that adjusts a time interval for field intensity measurement in the measuring unit." Reed simply adjusts the averaging interval for AVG blocks 140, 145 using an antenna imbalance 150. Incorporating the AVG blocks 140, 145 and the antenna imbalance 150 of Reed in the system of Konishi would be futile, as there is no need to adjust an averaging interval for AVG blocks in the system of Konishi. Moreover, adjusting the averaging interval for the AVG blocks 140, 145 would not provide accurate measurements in the Kimura reference, notwithstanding the Patent Office's assertions. The present invention achieves low power consumption by performing efficient field intensity measurement of the base station. Clearly, the Konishi/Reed combination does not suggest the claimed invention, and there is no sufficient basis for combining the references. Thus, the proposed modification is no more than a hindsight reliance on the teachings in the present application of the advantages of the present invention.

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20 See id. at 1457.

21 Office Action at 3.

Accordingly, the combination of Konishi and Reed is improper as being impermissibly motived in hindsight by the teachings of the present application.

B. Konishi/Reed and Kimura combination

The combined disclosures of Konishi/Reed and Kimura do not render the pending claims obvious because there is no motivation, absent the hindsight reconstruction of the present invention, to modify the disclosure of Konishi/Reed in accordance with the disclosure of Kimura.

The Patent Office asserts that:

> [I]t would have been obvious to one of ordinary skill in the art to modify the combination of Konishi and Reed to take the absolute values of the RSSI with respect to the base stations for the purpose of measurement techniques and conversions therein (e.g., A/D converted DC level).[22]

This assertion, however, is non-sensical. It is unclear why a skilled artisan would use absolute values of a RSSI for "measurement techniques and conversions therein" in the cell switching method and device of the present invention. Even assuming, arguendo, that a skilled artisan would use absolute values of a RSSI for such an obscured purpose, it would not have been obvious to a skilled artisan to take into consideration absolute values of field intensity with respect to a grid matrix, as disclosed in Kimura, in the method and device of the present invention. Clearly, the Konishi/Reed and Kimura combination does not suggest the claimed invention, and there is no sufficient basis for combining the references. Thus, the proposed modification is no more than a hindsight reliance on the teachings in the present application of the advantages of the present invention.

Accordingly, the combination of Konishi/Reed and Kimura is improper as being impermissibly motived in hindsight by the teachings of the present application.

C. Konishi/Reed and Levanon combination

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[22] Office Action at 5.

The combined disclosures of Konishi/Reed and Levanon do not render the pending claims obvious because there is no motivation, absent the hindsight reconstruction of the present invention, to modify the disclosure of Konishi/Reed in accordance with the disclosure of Levanon.

The Patent Office asserts that:

> [I]t would have been obvious to one of ordinary skill in the art to modify the combination of Konishi and Reed to include positioning a satellite in conjunction with the base station system for the purpose of accurately determining the location of a mobile user.[23]

However, the Patent Office has merely speculated and provides no support for this contention. As admitted by the Patent Office, Levanon discloses positioning of a satellite for the purpose of accurately determining the *location of a mobile user*. However, as set forth in claims 5 and 11, the *time interval* for field intensity measurement with respect to a base station *is controlled*, taking into consideration a direction of movement of a satellite. Since Levanon does not disclose this limitation, it would not have been obvious to combine the Levanon reference with the Konishi/Reed combination. Hence, the Konishi/Reed and Levanon combination does not suggest the claimed invention, and there is no sufficient basis for combining the references. Thus, the proposed modification is no more than a hindsight reliance on the teachings in the present application of the advantages of the present invention.

Accordingly, the combination of Konishi/Reed and Levanon is improper as being impermissibly motived in hindsight by the teachings of the present application.

In view thereof, the §103 rejections of claims 1-11 are improper and should be reversed.

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[23] Office Action at 6.

Applicant submits that the present application is now in condition for allowance. Reconsideration and favorable action are earnestly requested.

Respectfully submitted,

By _____

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